

DATE: 9 December 2020
DESIGNER: Declan Doyle
PROJECT No: KE/RE/CCK/01 rev 7
PROJECT NAME: Capdoo & Abbeylands Clane Co. Kildare



Lighting to class P3 - warm white 2700k

Dimming to 2A regime, S/P Ratio 1.30

- A) Philips Luma Micro BGP702 DW52, 4.40klm, 26w CLO
- B) Philips Luma Micro BGP702 DX51, 3.60klm, 22w CLO
- C) Philips Luma Micro BGP702 DW50, 5.80klm, 35w CLO

C/W 7 pin NEMA socket & photocell

mounted on 6m columns

Outdoor Lighting Report

PREPARED BY: Declan Doyle,
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Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Estate North	397.63	823.60	375.70	236.21	1.50	1.49
2	Estate South	509.73	588.85	211.52	171.91	1.49	1.49

Luminaires

Luminaire A Data

Supplier	
Type	BGP702 DW52
Lamp(s)	LED-HB 5.2S 727/2700
Lamp Flux (klm)	4.40
File Name	Luma Gen2 Micro_BGP702_DW52_4400_20LED_5.2S_CLO_L90_727.ies
Maintenance Factor	0.76
Lum. Int. Class	G1
Lamp S/P Ratio	1.04
No. in Project	69

Luminaire B Data

Supplier	
Type	BGP702 DX51
Lamp(s)	LED-HB 5.2S 727/2700
Lamp Flux (klm)	3.60
File Name	Luma Gen2 Micro_BGP702_DX51_3600_20LED_5.2S_CLO_L90_727.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	467.9, 27.1, 0.0
Lamp S/P Ratio	1.04
No. in Project	19

Luminaire C Data

Supplier	
Type	BGP702 DW50
Lamp(s)	LED-HB 5.2S 727/2700
Lamp Flux (klm)	5.80
File Name	Luma Gen2 Micro_BGP702_DW50_5800_20LED_5.2S_CLO_L90_727.ies
Maintenance Factor	0.76
Lum. Int. Class	G2
Lamp S/P Ratio	1.04
No. in Project	6

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	545.27	983.80	6.00	331.00	5.00	0.00	0.00			
2	C	723.35	811.91	6.00	342.00	5.00	0.00	0.00			
3	C	738.20	835.13	6.00	316.00	5.00	0.00	0.00			
4	C	761.87	857.41	6.00	314.00	5.00	0.00	0.00			
5	C	784.40	878.59	6.00	315.00	5.00	0.00	0.00			
6	C	807.42	898.97	6.00	315.00	5.00	0.00	0.00			
7	A	430.39	854.18	6.00	101.00	5.00	0.00	0.00			
8	A	460.87	873.68	6.00	279.00	5.00	0.00	0.00			
9	B	461.37	924.14	6.00	331.00	5.00	0.00	0.00			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
10	A	479.34	904.49	6.00	62.00	5.00	0.00	0.00			
11	A	490.74	918.67	6.00	245.00	5.00	0.00	0.00			
12	B	509.60	987.90	6.00	328.00	5.00	0.00	0.00			
13	A	524.92	971.38	6.00	56.00	5.00	0.00	0.00			
14	A	538.93	974.59	6.00	238.00	5.00	0.00	0.00			
15	A	428.26	867.60	6.00	277.00	5.00	0.00	0.00			
16	A	451.85	858.73	6.00	99.00	5.00	0.00	0.00			
17	A	478.02	865.56	6.00	132.00	5.00	0.00	0.00			
18	A	499.65	887.28	6.00	135.00	5.00	0.00	0.00			
19	A	520.20	907.45	6.00	136.00	5.00	0.00	0.00			
20	A	521.25	933.54	6.00	330.00	5.00	0.00	0.00			
21	A	534.17	958.62	6.00	331.00	5.00	0.00	0.00			
22	B	566.34	979.42	6.00	154.00	5.00	0.00	0.00			
23	A	557.14	1004.15	6.00	332.00	5.00	0.00	0.00			
24	A	626.29	978.70	6.00	245.00	5.00	0.00	0.00			
25	A	587.41	994.29	6.00	245.00	5.00	0.00	0.00			
26	A	606.90	986.46	6.00	245.00	5.00	0.00	0.00			
27	A	648.74	969.84	6.00	245.00	5.00	0.00	0.00			
28	A	672.93	960.08	6.00	245.00	5.00	0.00	0.00			
29	A	689.92	947.97	6.00	195.00	5.00	0.00	0.00			
30	A	683.91	930.50	6.00	152.00	5.00	0.00	0.00			
31	A	675.61	912.88	6.00	152.00	5.00	0.00	0.00			
32	A	667.13	894.52	6.00	152.00	5.00	0.00	0.00			
33	A	652.66	870.43	6.00	68.00	5.00	0.00	0.00			
34	A	590.22	898.07	6.00	65.00	5.00	0.00	0.00			
35	A	607.06	920.71	6.00	152.00	5.00	0.00	0.00			
36	B	617.88	934.53	6.00	152.00	5.00	0.00	0.00			
37	B	599.24	942.94	6.00	335.00	5.00	0.00	0.00			
38	B	625.99	951.92	6.00	153.00	5.00	0.00	0.00			
39	B	715.20	934.37	6.00	307.00	5.00	0.00	0.00			
40	A	729.96	923.04	6.00	223.00	5.00	0.00	0.00			
41	A	738.64	913.80	6.00	307.00	5.00	0.00	0.00			
42	A	763.79	912.90	6.00	226.00	5.00	0.00	0.00			
43	A	781.03	894.72	6.00	223.00	5.00	0.00	0.00			
44	B	441.56	831.71	6.00	321.00	5.00	0.00	0.00			
45	B	452.04	812.93	6.00	50.00	5.00	0.00	0.00			

Layout Continued

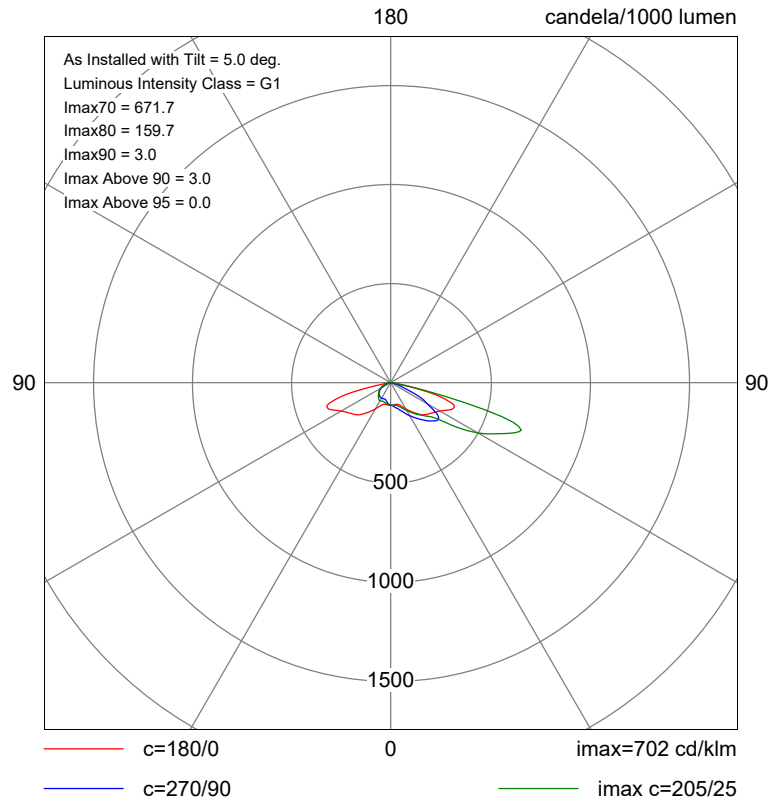
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
46	A	478.20	821.03	6.00	313.00	5.00	0.00	0.00			
47	B	467.97	799.71	6.00	137.00	5.00	0.00	0.00			
48	A	486.34	852.92	6.00	225.00	5.00	0.00	0.00			
49	A	471.77	842.79	6.00	45.00	5.00	0.00	0.00			
50	A	491.71	822.78	6.00	44.00	5.00	0.00	0.00			
51	A	516.89	813.14	6.00	66.00	5.00	0.00	0.00			
52	B	636.85	853.55	6.00	243.00	5.00	0.00	0.00			
53	A	624.89	847.06	6.00	246.00	5.00	0.00	0.00			
54	B	646.15	830.77	6.00	152.00	5.00	0.00	0.00			
55	A	605.70	857.82	6.00	241.00	5.00	0.00	0.00			
56	A	611.85	712.73	6.00	345.00	5.00	0.00	0.00			
57	A	582.03	869.93	6.00	243.00	5.00	0.00	0.00			
58	A	561.55	855.06	6.00	137.00	5.00	0.00	0.00			
59	B	547.15	840.55	6.00	131.00	5.00	0.00	0.00			
60	B	533.61	827.18	6.00	134.00	5.00	0.00	0.00			
61	A	542.12	800.15	6.00	66.00	5.00	0.00	0.00			
62	A	569.55	786.26	6.00	65.00	5.00	0.00	0.00			
63	A	596.98	772.23	6.00	63.00	5.00	0.00	0.00			
64	A	628.16	772.62	6.00	280.00	5.00	0.00	0.00			
65	A	654.43	769.92	6.00	255.00	5.00	0.00	0.00			
66	A	684.59	766.46	6.00	160.00	5.00	0.00	0.00			
67	A	697.61	757.51	6.00	254.00	5.00	0.00	0.00			
68	A	633.63	701.36	6.00	73.00	5.00	0.00	0.00			
69	A	655.65	694.98	6.00	73.00	5.00	0.00	0.00			
70	A	675.68	689.25	6.00	74.00	5.00	0.00	0.00			
71	B	564.78	667.39	6.00	307.00	5.00	0.00	0.00			
72	B	598.66	659.73	6.00	254.00	5.00	0.00	0.00			
73	A	589.01	666.46	6.00	251.00	5.00	0.00	0.00			
74	A	610.56	649.60	6.00	253.00	5.00	0.00	0.00			
75	B	532.68	607.02	6.00	344.00	5.00	0.00	0.00			
76	B	539.58	588.23	6.00	69.00	5.00	0.00	0.00			
77	A	554.92	595.75	6.00	73.00	5.00	0.00	0.00			
78	A	576.04	589.65	6.00	75.00	5.00	0.00	0.00			
79	A	602.07	585.58	6.00	98.00	5.00	0.00	0.00			
81	A	615.87	605.92	6.00	162.00	5.00	0.00	0.00			
82	A	622.19	627.60	6.00	162.00	5.00	0.00	0.00			

Layout Continued

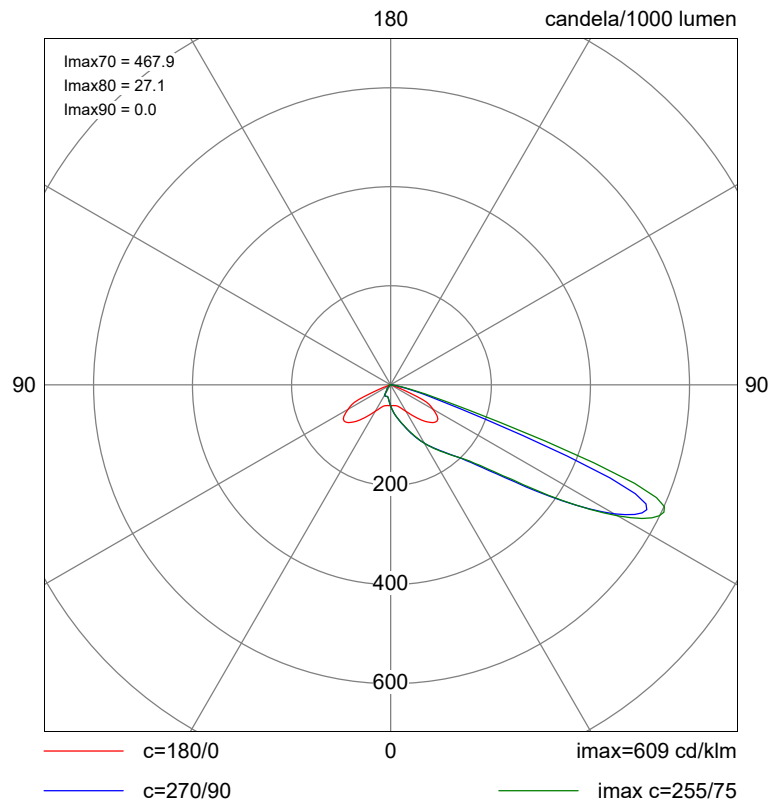
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
83	A	632.35	643.43	6.00	254.00	5.00	0.00	0.00			
84	A	655.20	636.77	6.00	256.00	5.00	0.00	0.00			
85	B	676.08	613.30	6.00	167.00	0.00	0.00	0.00			
86	A	672.39	636.49	6.00	347.00	5.00	0.00	0.00			
87	A	678.53	659.18	6.00	346.00	5.00	0.00	0.00			
88	A	685.33	682.98	6.00	344.00	5.00	0.00	0.00			
89	A	700.79	646.94	6.00	51.00	5.00	0.00	0.00			
90	A	705.40	627.96	6.00	347.00	5.00	0.00	0.00			
91	A	695.46	606.91	6.00	318.00	5.00	0.00	0.00			
92	A	696.07	720.08	6.00	345.00	5.00	0.00	0.00			
93	A	702.88	743.53	6.00	344.00	5.00	0.00	0.00			
94	C	712.31	779.37	6.00	343.00	5.00	0.00	0.00			
95	A	584.86	647.61	6.00	74.00	5.00	0.00	0.00			

Polar Diagrams

Luminaire A BGP702 DW52

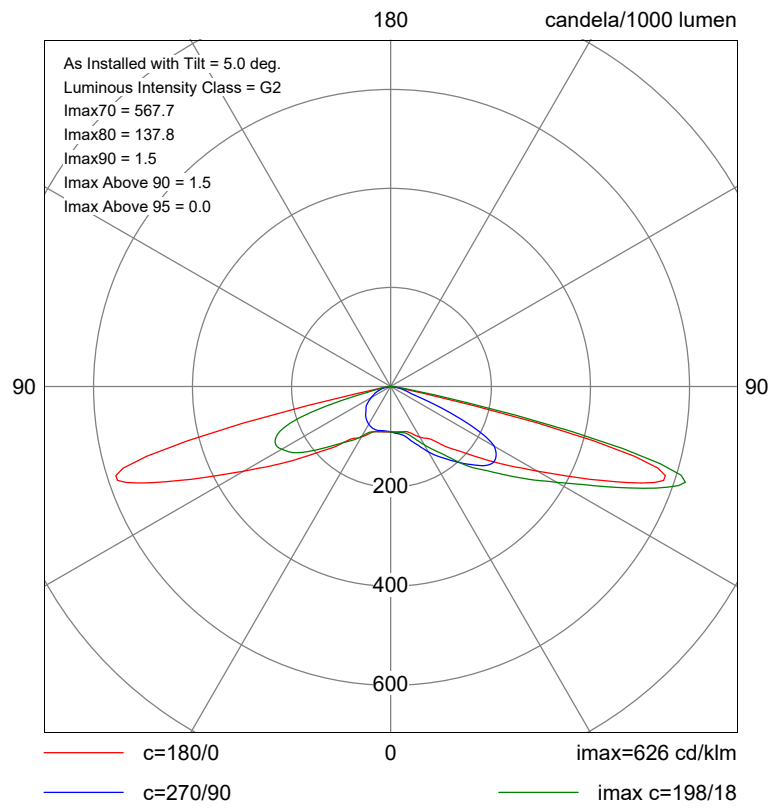


Luminaire B BGP702 DX51



Polar Diagrams Continued

Luminaire C BGP702 DW50



Horizontal Illuminance (lux)

Estate North



Results

Eav	6.94
Emin	1.86
Emax	16.42
Emin/Emax	0.11
Emin/Eav	0.27

Horizontal Illuminance (lux)

Estate South



Results

Eav	7.83
Emin	2.16
E _{max}	13.58
E _{min} /E _{max}	0.16
E _{min} /E _{av}	0.28